

Work Order ID: 76164

\*76164\*

Page 1

Monday, November 07, 2011 12:57:46 PM

Item ID: D3257-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Fitting

Start Date: 11/7/2011 Start Qty: 6.00 \*6\*

Cust Item ID:

Required Date: 11/16/2011 Req'd Qty: 6.00 \*6\*

Customer:

Reference:

Approvals: Process Plan: / Date: 11-07

Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3257    | Rev A1       |

|                |  |      |  |  |  |  |  |  |  |
|----------------|--|------|--|--|--|--|--|--|--|
| 100            |  | 0.00 |  |  |  |  |  |  |  |
| *100*          | BAND SAW                                     |      |  |  |  |  |  |  |  |
| Bandsaw        | Memo   | 0.00 |  |  |  |  |  |  |  |
| Jeaspa Bandsaw | Cut blank: 0.500" x 0.500" x 1.180" long Bar |      |  |  |  |  |  |  |  |

11/12/14

10

|                              |  |      |  |  |  |  |  |  |  |
|------------------------------|--|------|--|--|--|--|--|--|--|
| 110                          |  | 0.00 |  |  |  |  |  |  |  |
| *110*                        | HAAS CNC VERTICAL MACHINING #1   |      |  |  |  |  |  |  |  |
| HAAS 1                       | Memo   | 0.00 |  |  |  |  |  |  |  |
| HAAS CNC vertical machine #1 | Machine as per Folio FA420 and Dwg D32571-Deburr2-<br>*****FINISH TAPPING PARTS BY HAND AS PER DWG<br>D3257***** |      |  |  |  |  |  |  |  |

CY 11/12/14 10  
issue Pro to Archer. P/O: 15679

Machine as per dwg D 3257 Rev 2.4

|                 |   |      |  |  |  |  |  |  |  |
|-----------------|---|------|--|--|--|--|--|--|--|
| 120             |   | 0.00 |  |  |  |  |  |  |  |
| *120*           | QC2- Inspect parts off machine FAI/FAIB |      |  |  |  |  |  |  |  |
| QC              | Memo                                    | 0.00 |  |  |  |  |  |  |  |
| Quality Control |   |      |  |  |  |  |  |  |  |

Rec'd + inspect for transit damage -  
attached COC to W/O

11/12/14 (9)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 76164****\*76164\***

Page 2

Monday, November 07, 2011 12:57:46 PM

Item ID: D3257-1 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Fitting  
Start Date: 11/7/2011 Start Qty: 6.00 **\*6\*** Cust Item ID:  
Required Date: 11/16/2011 Req'd Qty: 6.00 **\*6\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID                | Operation<br>Description                                       | Set Up/<br>Run Hours                      | Tool ID  | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp                             |
|---|--|---|--|--------|--------------|---------------|---------------|------------------|--|
| 130<br><b>*130*</b><br>QC<br>Quality Control  | QC8- Inspect parts - second check<br><br>Memo                  | 0.00 <i>SmB</i><br><i>12-8-02</i><br>0.00 | <i>DAS</i><br><i>16</i><br><i>2-83</i><br><i>1702/14</i> |        |              | <i>9</i>      |               |                  | <i>7th</i>                                 |
| 140<br><b>*140*</b><br>Packaging<br>Packaging | Identify as per dwg & Stock Location: <i>ST3/b</i><br><br>Memo | 0.00<br>0.00                              |  |        |              | <i>9x</i>     |               |                  | <i>SP</i><br><i>12-8-8</i>                 |
| 150<br><b>*150*</b><br>QC<br>Quality Control  | QC21- Final Inspection - Work Order Release<br><br>Memo        | 0.00<br>0.00                              |  |        |              |               |               |                  | <i>MCS 12108123</i><br><br><i>12/24/24</i> |

| W/O: 76164 |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE       | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|            |      |                    |    |      |     |                                     |                          |
|            |      |                    |    |      |     |                                     |                          |

See Pink NCR  
12-1756  
Supplier fault.  
Archer Precision

Part No: D3257-1 PAR #: \_\_\_\_\_ Fault Category: Supplier NCR: ☒ Yes ☐ No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: Scrap Disposition: Scrap QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR:     |      | WORK ORDER NON-CONFORMANCE (NCR)                |   |   |                |                               |   |                               |
|----------|------|---|---|---|----------------|-------------------------------|---|-------------------------------|
| DATE     | STEP | Description of NC<br>Section A                  | Corrective Action Section B             |   |                | Verification<br>Section C     | Approval<br>Chief Eng                   | Approval<br>QC Inspector      |
|          |      |   | Initial<br>Chief Eng                    | Action Description<br>Chief Eng   | Sign &<br>Date |                               |   |                               |
| 12/08/07 | 110  | Qty + Part scrap by<br>Supplier<br>Re. Supplier | DAS<br>16<br>9-83<br>067017<br>12/08/07 | <del>Reduce</del> Reduce by -1<br>See attached email from<br>Supplier on this issue | n/a            | DAS<br>16<br>9-83<br>12/08/07 | DAS<br>16<br>9-83<br>067017<br>12/08/07 | DAS<br>16<br>9-83<br>12/08/07 |
|          |      |   |   |   |                |                               |   |                               |
|          |      |   |   |   |                |                               |   |                               |

41.59 (x303.84 on w/o 15100)

NOTE: Date & initial all entries

# Picklist Print

Page 1

Monday, November 07, 2011 12:57:51 PM

Work Order ID: 76164

\*76164\*

Parent Item: D3257-1

\*D3257-1\*

Parent Item Name: Fitting

Start Date: 11/7/2011

Required Date: 11/16/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: A04.04.14New issueKJ/RF

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| <del>303B0.500X0.500</del>      |                        | Purchased     | No          |                     |                  | 100             | f                  | 8.7609         | 0.1092      | 0.689684     |               |                |        |

~~M303B0.500X0.500\*~~

AISI 303 Bar .500 x .500

\*\*

Location

Loc Qty

Loc Code

MAT050

8.7609

111571

8.7609

1.2 f 11/12/13

D 3257-1 P

x 10

11/2/12 (4)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

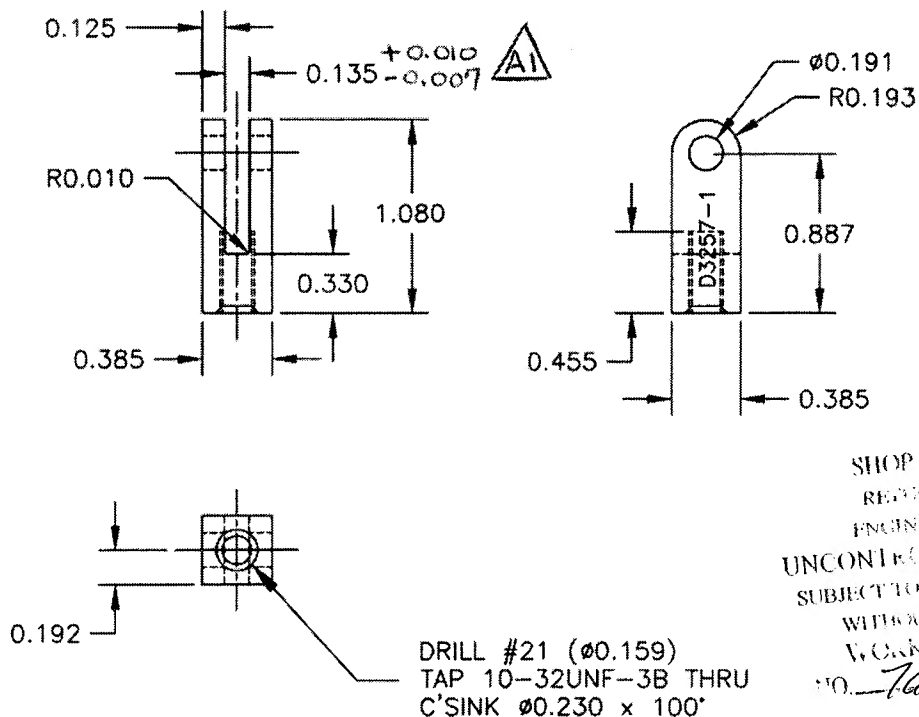
**NOTE:** Date & initial all entries





|                  |                |   |                        |
|------------------|----------------|---|------------------------|
| DESIGN<br>RT     | DRAWN BY<br>RT | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>H     | APPROVED<br>H  | DRAWING NO.<br>D3257                              | REV. A<br>SHEET 1 OF 1 |
| DATE<br>04.01.27 |                | TITLE<br>FITTING                                  | SCALE<br>1:1           |
| A                | 04.01.27       | NEW ISSUE   |                        |
| AI               | 04.12.14       | ADD TOLERANCE                                     |                        |

RELEASED  
04.04.05



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED  
SUBJECT TO AND MARKED  
WITHOUT NOTICE  
WORK ORDER  
NO. 76169

R 11/11-07

### D3257-1 FITTING

#### NOTES:

- 1) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.015
- 2) MATERIAL: AISI 303 SS, BAR (REF DART SPEC. M303B0.500X0.500)
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE INCHES
- 6) ENGRAVE DART P/N AS SHOWN

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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



2228 Gladwin Cresent  
Ottawa, Ontario  
K1B 4S6  
Phone # 613-899-2405

## Packing Slip

| Date      | Invoice # |
|-----------|-----------|
| 7/31/2012 | 201       |

|   |
|---|
| Ship To   |
| Main Finished Goods Location<br>Dart Aerospace<br>1270 Aberdeen Street<br>Hawksbury, Ontario<br>K6A 1K7 |

| P.O. No. | Ship      | Via             | FOB    | Project |
|----------|-----------|-----------------|--------|---------|
| 15679    | 7/31/2012 | Federal Express | Archer |         |

| Qty | Item Code | Description                           |
|-----|-----------|---------------------------------------|
| 9   | Sales     | D3257-1P Fitting<br>HST (ON) on sales |
|     |           |                                       |



2228 Gladwin Cres.  
Ottawa, Ont.  
K1B 4S6

Telephone (613) 899-2405  
Fax (613) 226-1719

## Certificate of Compliance

To  
Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury Ont.  
K6A 1K7

| Po Number | Part Number | Quantities |
|-----------|-------------|------------|
| 15679     | D3257-1P    | 9          |
|           |             |            |
|           |             |            |
|           |             |            |

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 15679 issued by Dart Aerospace Inc.

Alex Mazerolle  
President  
Archer Precision Inc.  
1393 Major Road,  
Orleans Ontario  
K1E 1H3



# Inspection Report

|  |                     |                  |                         |                  |                             |                            |      |                        |
|--|---------------------|------------------|-------------------------|------------------|-----------------------------|----------------------------|------|------------------------|
| Customer Name<br><b>Dart Aerospace</b> |                     | QTY<br><b>10</b> | DWG #<br><b>D3257-1</b> | REV.<br><b>A</b> | Part Name<br><b>FITTING</b> | Date<br><b>JAN 27/2012</b> | Lot# | Job #<br><b>477-10</b> |
| Page 1 of                              | Inspection Interval | Special Notes    |                         |                  |                             |                            |      |                        |

| Item # | DWG. Dim | Tolerance    | Operator<br>First Off | QA First Off |   | QA Final |   | 2     |       | 3     | 4     | 5     | 6     | 7     | 8     | 9 | 10 |
|--------|----------|--------------|-----------------------|--------------|---|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|---|----|
|        |          |              |                       | A            | R | A        | R |       |       |       |       |       |       |       |       |   |    |
|        | Rev      | A            | ✓                     | ✓            |   | ✓        |   |       |       |       |       |       |       |       |       |   |    |
|        | MAT      | 303 SS       | ✓                     | ✓            |   | ✓        |   |       |       |       |       |       |       |       |       |   |    |
|        | SUB      | -            |                       |              |   |          |   |       |       |       |       |       |       |       |       |   |    |
|        | Deburr   | YES          | ✓                     | ✓            |   | ✓        |   |       |       |       |       |       |       |       |       |   |    |
| 1      | .125     | ±.005        | .126                  | ✓            |   | ✓        |   | .124  | .124  | .128  | .123  | .127  | .125  | .122  | .127  |   |    |
| 2      | .135     | +0.01/-0.007 | .134                  | ✓            |   | ✓        |   | .139  | .138  | .139  | .141  | .140  | .139  | .142  | .140  |   |    |
| 3      | R.01     | ±.005        | .01                   | ✓            |   | ✓        |   | PP    | PP    | PP    | PP    | PP    | PP    | PP    | PP    |   |    |
| 4      | 1.080    | ±.005        | 1.079                 | ✓            |   | ✓        |   | 1.081 | 1.081 | 1.082 | 1.081 | 1.081 | 1.081 | 1.081 | 1.081 |   |    |
| 5      | .330     | ±.005        | .330                  | ✓            |   | ✓        |   | .329  | .329  | .327  | .329  | .327  | .330  | .329  | .330  |   |    |
| 6      | .385     | ±.005        | .385                  | ✓            |   | ✓        |   | .384  | .384  | .385  | .384  | .385  | .385  | .384  | .385  |   |    |
| 7      | .192     | ±.005        | .190                  | ✓            |   | ✓        |   | .191  | .191  | .192  | .191  | .192  | .191  | .191  | .191  |   |    |
| 8      | 10-32    | -            | ✓                     | ✓            |   | ✓        |   | ✓     | ✓     | ✓     | ✓     | ✓     | ✓     | ✓     | ✓     |   |    |
| 9      | Ø.230    | ±.005        | .226                  | ✓            |   | ✓        |   | .226  | .228  | .228  | .230  | .229  | .229  | .229  | .229  |   |    |
| 10     | 100°     | ±.005        | 100°                  | ✓            |   | ✓        |   | 100   | 100   | 100   | 100   | 100   | 100   | 100   | 100°  |   |    |
| 11     | .385     | ±.005        | .384                  | ✓            |   | ✓        |   | .385  | .386  | .386  | .385  | .386  | .386  | .386  | .385  |   |    |
| 12     | .455     | ±.005        | .458                  | ✓            |   | ✓        |   | .455  | .460  | .458  | .460  | .460  | .460  | .460  | .459  |   |    |
| 13     | .887     | ±.005        | .885                  | ✓            |   | ✓        |   | .885  | .885  | .885  | .886  | .885  | .885  | .886  | .886  |   |    |
| 14     | R.193    | ±.005        | .1923                 | ✓            |   | ✓        |   | PP    | PP    | PP    | PP    | PP    | PP    | PP    | PP    |   |    |
| 15     | Ø.191    | ±.005        | .191                  | ✓            |   | ✓        |   | .191  | .191  | .191  | .191  | .191  | .191  | .191  | .191  |   |    |

## Jean-Luc Menard

**From:** alex@archerprecision.ca  
**Sent:** Tuesday, August 07, 2012 8:33 AM  
**To:** Jean-Luc Menard  
**Subject:** Re: D3257-1

Good morning Jean-Luc,

We scraped it, and one of my guys destroyed it and threw it out. He didn't realize we keep the scrap parts and send them back to you.

How did that large quote for the lath work look?

I am on holidays this week but I am checking emails and if you need anything, just let me know.

Thanks,

Alex

Sent from my BlackBerry® phone powered by Koodo Mobile®.

---

**From:** "Jean-Luc Menard" <jmenard@dartaero.com>  
**Date:** Tue, 7 Aug 2012 07:48:46 -0400  
**To:** Alex Mazerolle <Alex@archerprecision.ca>  
**Subject:** D3257-1

Hi Alex,

The P.O was for a qty of 10 and we received 9.

Could you tell me what happened to the 10 th so I can attach to the w/o.(QC is asking).

Thx

JL

## Jean-Luc Menard

*Production Engineering Coordinator*



DART AEROSPACE

1270 Aberdeen Street

Hawkesbury Ontario

Canada K6A 1K7

Tel:(613)632-5200 Ext 227

[jmenard@dartaero.com](mailto:jmenard@dartaero.com)



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